

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 16:47:28 ON 09 JAN 2004

=> fil .bec

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,
ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 16:47:54 ON 09 JAN 2004
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

11 FILES IN THE FILE LIST

=> s (commercial or scale or batch) (10a) (sialyl? or glycosylat?)

FILE 'MEDLINE'

38986 COMMERCIAL

120028 SCALE

9420 BATCH

6543 SIALYL?

39942 GLYCOSYLAT?

L1 56 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

FILE 'SCISEARCH'

87545 COMMERCIAL

278198 SCALE

33844 BATCH

6705 SIALYL?

30960 GLYCOSYLAT?

L2 88 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

FILE 'LIFESCI'

21315 COMMERCIAL

32165 SCALE

10276 BATCH

1615 SIALYL?

9593 GLYCOSYLAT?

L3 27 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

FILE 'BIOTECHDS'

5741 COMMERCIAL

14335 SCALE

12107 BATCH

403 SIALYL?

3526 GLYCOSYLAT?

L4 66 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

FILE 'BIOSIS'

85230 COMMERCIAL

139389 SCALE

22994 BATCH

7315 SIALYL?

34885 GLYCOSYLAT?

L5 73 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

FILE 'EMBASE'

36480 COMMERCIAL

131776 SCALE

15222 BATCH

6182 SIALYL?

31840 GLYCOSYLAT?

L6 75 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

FILE 'HCAPLUS'
28321 COMMERCIAL
266795 COM
280438 COMMERCIAL
(COMMERCIAL OR COM)
314173 SCALE
78225 BATCH
8086 SIALYL?
37716 GLYCOSYLAT?
L7 144 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

FILE 'NTIS'
51928 COMMERCIAL
80947 SCALE
6305 BATCH
18 SIALYL?
118 GLYCOSYLAT?
L8 1 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

FILE 'ESBIOBASE'
20071 COMMERCIAL
49588 SCALE
10033 BATCH
2703 SIALYL?
11895 GLYCOSYLAT?
L9 41 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

FILE 'BIOTECHNO'
14938 COMMERCIAL
23003 SCALE
11409 BATCH
3202 SIALYL?
16990 GLYCOSYLAT?
L10 46 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

FILE 'WPIDS'
39606 COMMERCIAL
117188 SCALE
26215 BATCH
410 SIALYL?
2412 GLYCOSYLAT?
L11 12 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

TOTAL FOR ALL FILES
L12 629 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)

=> s l12 not 1998-2004/py

FILE 'MEDLINE'
2979269 1998-2004/PY
L13 29 L1 NOT 1998-2004/PY

FILE 'SCISEARCH'
5861045 1998-2004/PY
L14 45 L2 NOT 1998-2004/PY

FILE 'LIFESCI'
617203 1998-2004/PY
L15 15 L3 NOT 1998-2004/PY

FILE 'BIOTECHDS'
103353 1998-2004/PY
L16 47 L4 NOT 1998-2004/PY

FILE 'BIOSIS'

3254024 1998-2004/PY
 L17 42 L5 NOT 1998-2004/PY

 FILE 'EMBASE'
 2634784 1998-2004/PY
 L18 44 L6 NOT 1998-2004/PY

 FILE 'HCAPLUS'
 5491477 1998-2004/PY
 L19 74 L7 NOT 1998-2004/PY

 FILE 'NTIS'
 117194 1998-2004/PY
 L20 1 L8 NOT 1998-2004/PY

 FILE 'ESBIOBASE'
 1701387 1998-2004/PY
 L21 12 L9 NOT 1998-2004/PY

 FILE 'BIOTECHNO'
 724097 1998-2004/PY
 L22 24 L10 NOT 1998-2004/PY

 FILE 'WPIDS'
 4772772 1998-2004/PY
 L23 3 L11 NOT 1998-2004/PY

 TOTAL FOR ALL FILES
 L24 336 L12 NOT 1998-2004/PY

=> dup rem l24

PROCESSING COMPLETED FOR L24

L25 156 DUP REM L24 (180 DUPLICATES REMOVED)

=> d tot

L25 ANSWER 1 OF 156 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 TI Control of interferon-gamma **glycosylation** by the addition of
 defined lipid supplements to **batch** cultures of recombinant
 Chinese hamster ovary cells.
 SO Funatsu, K. [Editor]; Shirai, Y. [Editor]; Matsushita, T. [Editor]. (1997)
 pp. 339-345. Animal Cell Technology.
 Publisher: Kluwer Academic Publishers, PO Box 989, 3300 AZ Dordrecht,
 Netherlands; Kluwer Academic Publishers, 101 Phillip Drive, Norwell,
 Massachusetts 02061, USA. Series: Animal Cell Technology.
 Meeting Info.: Eighth Annual Meeting of the Japanese Association for
 Animal Cell Technology. Iizuka, Japan. November 6-10, 1995.
 ISBN: 0-7923-4486-3.
 AU Green, N. H. [Reprint author]; Hooker, A. D. [Reprint author]; James, D.
 C. [Reprint author]; Baines, A. J. [Reprint author]; Strange, P. G.;
 Jenkins, N.; Bull, A. T. [Reprint author]
 AN 1997:466359 BIOSIS

 L25 ANSWER 2 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Chemoenzymatic synthesis of GM3, Lewis-X and sialyl-Lewis-X
 oligosaccharides in 13C-enriched form;
 ganglioside-GM3 oligosaccharide etc. production by sialylation with
 Trypanosoma cruzi recombinant trans-sialidase, and fucosylation with
 milk fucosyltransferase
 SO Tetrahedron Lett.; (1997) 38, 33, 5861-64
 CODEN: TELEAY ISSN: 0040-4039
 AU Probert M A; Milton M J; Harris R; Schenkman S; Brown J M; Homans S W;
 *Field R A
 AN 1997-10511 BIOTECHDS

L25 ANSWER 3 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 1
 TI Gamma-interferon production and quality in stoichiometric fed-batch
 cultures of Chinese hamster ovary (CHO) cells under serum-free conditions
 SO BIOTECHNOLOGY AND BIOENGINEERING, (5 DEC 1997) Vol. 56, No. 5, pp.
 577-582.
 Publisher: JOHN WILEY & SONS INC, 605 THIRD AVE, NEW YORK, NY 10158-0012.
 ISSN: 0006-3592.
 AU Xie L Z; Nyberg G; Gu X J; Li H Y; Mollborn F; Wang D I C (Reprint)
 AN 97:814754 SCISEARCH

L25 ANSWER 4 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Production of recombinant proteins in transgenic plants: practical
 considerations;
 a review
 SO Biotechnol.Bioeng.; (1997) 56, 5, 473-84
 CODEN: BIBIAU ISSN: 0006-3592
 AU Kusnadi A R; *Nikolov Z L; Howard J A
 AN 1998-00604 BIOTECHDS

L25 ANSWER 5 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 2
 TI Production of recombinant human antithrombin III on 20-L bioreactor scale:
 Correlation of supernatant neuraminidase activity, desialylation, and
 decrease of biological activity of recombinant glycoprotein
 SO BIOTECHNOLOGY AND BIOENGINEERING, (20 NOV 1997) Vol. 56, No. 4, pp.
 441-448.
 Publisher: JOHN WILEY & SONS INC, 605 THIRD AVE, NEW YORK, NY 10158-0012.
 ISSN: 0006-3592.
 AU Munzert E; Heidemann R; Bunttemeyer H; Lehmann J; Muthing J (Reprint)
 AN 97:789543 SCISEARCH

L25 ANSWER 6 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Prospective randomized study comparing the efficacy of bioequivalent doses
 of glycosylated and nonglycosylated rG-CSF for mobilizing peripheral blood
 progenitor cells
 SO British Journal of Haematology (1997), 96(2), 418-420
 CODEN: BJHEAL; ISSN: 0007-1048
 AU De Arriba, F.; Lozano, M. L.; Ortuno, F.; Heras, I.; Moraleda, J. M.;
 Vicente, V.
 AN 1997:177333 HCAPLUS
 DN 126:220508

L25 ANSWER 7 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 3
 TI Site- and branch-specific sialylation of recombinant human
 interferon-gamma in Chinese hamster ovary cell culture
 SO BIOTECHNOLOGY AND BIOENGINEERING, (20 JUL 1997) Vol. 55, No. 2, pp.
 390-398.
 Publisher: JOHN WILEY & SONS INC, 605 THIRD AVE, NEW YORK, NY 10158-0012.
 ISSN: 0006-3592.
 AU Gu X J; Harmon B J; Wang D I C (Reprint)
 AN 97:515441 SCISEARCH

L25 ANSWER 8 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Three types of recombinant human granulocyte colony-stimulating factor
 have equivalent biological activities in monkeys
 SO Cytokine (1997), 9(5), 360-369
 CODEN: CYTIE9; ISSN: 1043-4666
 AU Tanaka, Hideji; Tanaka, Yoshihiro; Shinagawa, Kyoko; Yamagishi, Yuji;
 Ohtaki, Kenji; Asano, Katsuhiko
 AN 1997:400352 HCAPLUS
 DN 127:117775

L25 ANSWER 9 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 4
 TI Influence of Primatone RL supplementation on sialylation of recombinant

- human interferon-gamma produced by Chinese hamster ovary cell culture using serum-free media
- SO BIOTECHNOLOGY AND BIOENGINEERING, (20 NOV 1997) Vol. 56, No. 4, pp. 353-360.
Publisher: JOHN WILEY & SONS INC, 605 THIRD AVE, NEW YORK, NY 10158-0012.
ISSN: 0006-3592.
- AU Gu X J; Xie L Z; Harmon B J; Wang D I C (Reprint)
AN 97:789535 SCISEARCH
- L25 ANSWER 10 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Control of interferon-gamma **glycosylation** by the addition of defined lipid supplements to **batch** cultures of recombinant Chinese hamster ovary cells
- SO Animal Cell Technology: Basic & Applied Aspects, Proceedings of the Annual Meeting of the Japanese Association for Animal Cell Technology, 8th, Fukuoka, November 6-10, 1995 (1997), Meeting Date 1995, 339-345.
Editor(s): Funatsu, Kazumori; Shirai, Yoshihito; Matsushita, Taku.
Publisher: Kluwer, Dordrecht, Neth.
CODEN: 64WUA2
- AU Green, N. H.; Hooker, A. D.; James, D. C.; Baines, A. J.; Strange, P. G.; Jenkins, N.; Bull, A. T.
AN 1997:563298 HCAPLUS
DN 127:219334
- L25 ANSWER 11 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI High resolution glycoform analysis of recombinant human interferon-gamma during batch cultures of Chinese hamster ovary cells
- SO Animal Cell Technology: Basic & Applied Aspects, Proceedings of the Annual Meeting of the Japanese Association for Animal Cell Technology, 8th, Fukuoka, November 6-10, 1995 (1997), Meeting Date 1995, 315-321.
Editor(s): Funatsu, Kazumori; Shirai, Yoshihito; Matsushita, Taku.
Publisher: Kluwer, Dordrecht, Neth.
CODEN: 64WUA2
- AU Hooker, A. D.; Goldman, M. H.; Green, N. H.; James, D. C.; Bull, A. T.; Strange, P. G.; Baines, A. J.; Jenkins, N.
AN 1997:563295 HCAPLUS
DN 127:219333
- L25 ANSWER 12 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 5
TI Purification and characterization of an alpha-L-rhamnosidase from *Aspergillus niger*
- SO FEMS MICROBIOLOGY LETTERS, (15 DEC 1997) Vol. 157, No. 2, pp. 279-283.
Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS.
ISSN: 0378-1097.
- AU Manzanares P; deGraaff L H; Visser J (Reprint)
AN 1998:201218 SCISEARCH
- L25 ANSWER 13 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Purification and characterization of an alpha-L-rhamnosidase from *Aspergillus niger*; enzyme purification
- SO FEMS Microbiol.Lett.; (1997) 157, 2, 279-83
CODEN: FMLED7 ISSN: 0378-1097
- AU Manzanares P; de Graaff L H; *Visser J
AN 1998-01164 BIOTECHDS
- L25 ANSWER 14 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Epitope determination for antibodies raised against recombinant human interferon-gamma
- SO Animal Cell Technology: From Vaccines to Genetic Medicine, [Proceedings of the Meeting of the ESACT], 14th, Vilamoura, Port., May 1996 (1997), Meeting Date 1996, 277-282. Editor(s): Carrondo, Manuel J. T.; Griffiths, Bryan; Moreira, Jose L. P. Publisher: Kluwer, Dordrecht, Neth.

CODEN: 64ELAL

AU Hooker, Andrew D.; Green, Nicola H.; James, David C.; Strange, Philip G.;
Baines, Anthony J.; Bull, Alan T.; Jenkins, Nigel

AN 1997:222311 HCAPLUS

DN 126:249970

L25 ANSWER 15 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Chromatographic determination of extinction coefficients of
non-glycosylated proteins using refractive index (RI) and UV absorbance
(UV) detectors: applications for studying protein interactions by size
exclusion chromatography with light-scattering, UV, and RI detectors

SO Techniques in Protein Chemistry VIII, [Symposium of the Protein Society],
10th, San Jose, Aug. 3-7, 1996 (1997), Meeting Date 1996, 113-119.
Editor(s): Marshak, Daniel R. Publisher: Academic, San Diego, Calif.
CODEN: 65GDAE

AU Wen, Jie; Arakawa, Tsutomu; Wypych, Jette; Langley, Keith E.; Schwartz,
Meredith G.; Philo, John S.

AN 1997:721366 HCAPLUS

DN 128:32085

L25 ANSWER 16 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Sialylation of interferon- γ in chinese hamster ovary cell culture

SO Book of Abstracts, 213th ACS National Meeting, San Francisco, April 13-17
(1997), BIOC-106 Publisher: American Chemical Society, Washington, D. C.
CODEN: 64AOAA

AU Gu, Xuejun; Wang, Daniel I. C.

AN 1997:230172 HCAPLUS

L25 ANSWER 17 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Synthesis and structural characterization of an antibacterial
glycoprotein.

SO Book of Abstracts, 214th ACS National Meeting, Las Vegas, NV, September
7-11 (1997), CARB-066 Publisher: American Chemical Society, Washington, D.
C.
CODEN: 64RNAO

AU Winans, K. A.; King, D. S.; Bertozzi, C. R.

AN 1997:486022 HCAPLUS

L25 ANSWER 18 OF 156 MEDLINE on STN DUPLICATE 6

TI Chemoenzymatic synthesis of a trimeric ganglioside GM3 analogue.

SO CARBOHYDRATE RESEARCH, (1997 Jun 11) 301 (1-2) 1-4.
Journal code: 0043535. ISSN: 0008-6215.

AU Earle M A; Manku S; Hultin P G; Li H; Palcic M M

AN 97372515 MEDLINE

L25 ANSWER 19 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI Sialylation of interferon-gamma in Chinese hamster ovary cell culture;
recombinant protein preparation in CHO cell culture (conference
abstract)

SO Abstr.Pap.Am.Chem.Soc.; (1997) 213 Meet., Pt.1, BIOT106
CODEN: ACSRAL ISSN: 0065-7727
American Chemical Society, 213th ACS National Meeting, San Francisco, CA,
13-17 April, 1997.

AU Gu X; Wang D I C

AN 1997-11606 BIOTECHDS

L25 ANSWER 20 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI Baculo virus vectors comprising a signal peptide and promoter;
for e.g. recombinant HIV virus-1 gp120 overexpression and
glycosylation in a Spodoptera frugiperda Sf9 insect cell culture

AU Murphy C I; Young E

AN 1996-08666 BIOTECHDS

PI US 5516657 14 May 1996

L25 ANSWER 21 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Enzymatic galactosylation of sugars with in situ regeneration of
 nucleotide sugar;
 oligosaccharide production with coenzyme regeneration, using
 sucrose-synthase, beta-1,4-galactosyltransferase and
 UDP-glucose-4-epimerase, with activator addition
 AU Hoersch B; Seiffert-Storiko A; Marquardt R; Zervosen A; Elling L; Kula M
 R
 AN 1997-01028 BIOTECHDS
 PI WO 9635801 14 Nov 1996

L25 ANSWER 22 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 8
 TI A CONVENIENT AND EFFICIENT SYNTHESIS OF SLEX ANALOGS
 SO JOURNAL OF ORGANIC CHEMISTRY, (03 MAY 1996) Vol. 61, No. 9, pp. 2938-2945.
 ISSN: 0022-3263.
 AU HAYASHI M (Reprint); TANAKA M; ITOH M; MIYAUCHI H
 AN 96:363122 SCISEARCH

L25 ANSWER 23 OF 156 MEDLINE on STN DUPLICATE 9
 TI Oligosaccharide mapping reveals hormone-specific glycosylation patterns on
 equine gonadotropin alpha-subunit Asn56.
 SO ENDOCRINOLOGY, (1996 Jun) 137 (6) 2543-57.
 Journal code: 0375040. ISSN: 0013-7227.
 AU Gotschall R R; Bousfield G R
 AN 96217295 MEDLINE

L25 ANSWER 24 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 10
 TI A new assay for sialyltransferases using fluorescein-labeled acceptors
 SO Liebigs Annalen (1996), (11), 1773-1784
 CODEN: LANAEM; ISSN: 0947-3440
 AU Limberg, Gerrit; Slim; George C.; Compston, Catherine A.; Stangier, Peter;
 Palcic, Monica M.; Furneaux, Richard H.
 AN 1997:149544 HCAPLUS
 Correction of: 1996:678653
 DN 126:154367
 Correction of: 126:16187

L25 ANSWER 25 OF 156 MEDLINE on STN DUPLICATE 11
 TI Exploring the substrate specificities of alpha-2,6- and
 alpha-2,3-sialyltransferases using synthetic acceptor analogues.
 SO EUROPEAN JOURNAL OF BIOCHEMISTRY, (1996 Dec 15) 242 (3) 674-81.
 Journal code: 0107600. ISSN: 0014-2956.
 AU Van Dorst J A; Tikkanen J M; Krezdorn C H; Streiff M B; Berger E G; Van
 Kuik J A; Kamerling J P; Vliegthart J F
 AN 97175036 MEDLINE

L25 ANSWER 26 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Large-scale preparation of sialyloligosaccharide from
 egg yolk
 SO Baiošaiensu to Indasutori (1996), 54(3), 200-1
 CODEN: BIDSE6; ISSN: 0914-8981
 AU Koketsu, Mamoru; Juneja, Lekh Raj; Kim, Mujo
 AN 1996:335752 HCAPLUS
 DN 125:5709

L25 ANSWER 27 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Synthesis and biological evaluation of clitocine analogs as adenosine
 kinase inhibitors.
 SO Book of Abstracts, 212th ACS National Meeting, Orlando, FL, August 25-29
 (1996), MEDI-156 Publisher: American Chemical Society, Washington, D. C.
 CODEN: 63BFAF
 AU Lee, Chih-Hung; Jiang, Meiqun; Daanen, Jerry; Kohlaas, Kathy L.;
 Alexander, Karen M.; Yu, Haixia; Kowaluk, Elizabeth A.; Bhagwat, Shripad
 S.

AN 1996:414744 HCAPLUS

L25 ANSWER 28 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
 TI **GLYCOSYLATION** ANALYSIS OF A MURINE MONOCLONAL-ANTIBODY DURING
SCALE-UP FROM ROLLER BOTTLE TO 200L FERMENTER
 SO ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, (24 MAR 1996) Vol.
 211, Part 1, pp. 133-BIOT.
 ISSN: 0065-7727.
 AU BHAT R (Reprint); JOHNSON L; MEIDER P; KELSEY W
 AN 96:249930 SCISEARCH

L25 ANSWER 29 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI **Glycosylation** analysis of a murine monoclonal antibody during
scale-up from roller bottle to 200L fermentor
 SO Book of Abstracts, 211th ACS National Meeting, New Orleans, LA, March
 24-28 (1996), BIOT-133 Publisher: American Chemical Society, Washington,
 D. C.
 CODEN: 62PIAJ
 AU Bhat, Ramadas; Johnson, L.; Meider, P.; Kelsey, W.
 AN 1996:217290 HCAPLUS

L25 ANSWER 30 OF 156 MEDLINE on STN DUPLICATE 12
 TI Enlarged **scale** chemical synthesis and range of activity of
 drosocin, an O-**glycosylated** antibacterial peptide of Drosophila.
 SO EUROPEAN JOURNAL OF BIOCHEMISTRY, (1996 May 15) 238 (1) 64-9.
 Journal code: 0107600. ISSN: 0014-2956.
 AU Bulet P; Urge L; Ohresser S; Hetru C; Otvos L Jr
 AN 96248422 MEDLINE

L25 ANSWER 31 OF 156 MEDLINE on STN DUPLICATE 13
 TI Separation of human serum transferrin isoforms by high-performance
 pellicular anion-exchange chromatography.
 SO PROTEIN EXPRESSION AND PURIFICATION, (1996 Feb) 7 (1) 39-44.
 Journal code: 9101496. ISSN: 1046-5928.
 AU Rohrer J S; Avdalovic N
 AN 96209930 MEDLINE

L25 ANSWER 32 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
 14
 TI HIGH-LEVEL SECRETION OF HUMAN ALPHA(1)-ANTITRYPSIN FROM
 SACCHAROMYCES-CEREVISIAE USING INULINASE SIGNAL SEQUENCE
 SO JOURNAL OF BIOTECHNOLOGY, (18 JUL 1996) Vol. 48, No. 1-2, pp. 15-24.
 ISSN: 0168-1656.
 AU KANG H A; NAM S W; KWON K S; CHUNG B H; YU M H (Reprint)
 AN 96:689358 SCISEARCH

L25 ANSWER 33 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI **Glycosylation** analysis of a murine monoclonal antibody during
scale-up from roller bottle to 200-l fermentor;
 mouse hybridoma cell culture in a perfusion culture vessel (conference
 abstract)
 SO Abstr.Pap.Am.Chem.Soc.; (1996) 211 Meet., Pt.1, BIOT133
 CODEN: ACSRAL ISSN: 0065-7727
 211th ACS National Meeting, New Orleans, CA, 24-28 March, 1996.
 AU Bhat R; Johnson L; Meider P; Kelsey W
 AN 1996-08743 BIOTECHDS

L25 ANSWER 34 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Alpha-2,8-sialyltransferase cDNA;
 gene cloning and expression; DNA probe for tumor-associated antigen
 detection and cancer diagnosis
 AN 1996-03350 BIOTECHDS
 PI JP 07327678 19 Dec 1995

L25 ANSWER 35 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
 17
 TI STERIC CONTROL OF N-ACETYLGALACTOSAMINE IN GLYCOSIDIC BAND FORMATION
 SO TETRAHEDRON LETTERS, (18 SEP 1995) Vol. 36, No. 38, pp. 6839-6842.
 ISSN: 0040-4039.
 AU YULE J E; WONG T C; GANDHI S S; QIU D X; RIOPEL M A; KOGANTY R R (Reprint)
 AN 95:656984 SCISEARCH

L25 ANSWER 36 OF 156 MEDLINE on STN DUPLICATE 18
 TI Large-**scale** expression of recombinant **sialyltransferases**
 and comparison of their kinetic properties with native enzymes.
 SO GLYCOCONJUGATE JOURNAL, (1995 Dec) 12 (6) 755-61.
 Journal code: 8603310. ISSN: 0282-0080.
 AU Williams M A; Kitagawa H; Datta A K; Paulson J C; Jamieson J C
 AN 96318012 MEDLINE

L25 ANSWER 37 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
 19
 TI AN IMPROVED PROCEDURE FOR THE SYNTHESIS OF 1,3-DIDEAZAADENOSINE
 SO SYNTHETIC COMMUNICATIONS, (1995) Vol. 25, No. 5, pp. 711-718.
 ISSN: 0039-7911.
 AU DEVLIN T A; JEBARATNAM D J (Reprint)
 AN 95:138669 SCISEARCH

L25 ANSWER 38 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
 20
 TI THE INFLUENCE OF DIETS AND GUT MICROFLORA ON LECTIN-BINDING PATTERNS OF
 INTESTINAL MUCINS IN RATS
 SO LABORATORY INVESTIGATION, (OCT 1995) Vol. 73, No. 4, pp. 558-564.
 ISSN: 0023-6837.
 AU SHARMA R (Reprint); SCHUMACHER U
 AN 95:751628 SCISEARCH

L25 ANSWER 39 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Effect of lipids on recombinant interferon- γ glycosylation
 SO Animal Cell Technology: Developments towards the 21st Century,
 [Proceedings of the Meeting], Veldhoven, Neth., Sept. 12-16, 1994 (1995),
 Meeting Date 1994, 391-396. Editor(s): Beuvery, E. Coen; Griffiths, J.
 Brian; Zeijlemaker, Wim P. Publisher: Kluwer, Dordrecht, Neth.
 CODEN: 62VAAP
 AU Jenkins, Nigel; Castro, Paula M. L.; Menon, Sunitha; Ison, Andrew P.;
 Bull, Alan T.
 AN 1996:307959 HCAPLUS
 DN 124:340584

L25 ANSWER 40 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Glycosylation heterogeneity of recombinant plasminogen expressed in CHO
 cells;
 determined using capillary zone electrophoresis and matrix-assisted
 lazer desorption/ionization MS
 SO Genet.Eng.Biotechnol.; (1995) 15, 4, 293-96
 CODEN: 4357H ISSN: 0959-020X
 AU Thomson A; Roberts G; Jenkins N
 AN 1996-03791 BIOTECHDS

L25 ANSWER 41 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
 21
 TI MONITORING OF RECOMBINANT INTERFERON-GAMMA **GLYCOSYLATION** DURING
BATCH FERMENTATION OF CHO CELLS
 SO GENETIC ENGINEER & BIOTECHNOLOGIST, (1995) Vol. 15, No. 4, pp. 281-284.
 ISSN: 0959-020X.
 AU HOOKER A D (Reprint)
 AN 96:226343 SCISEARCH

L25 ANSWER 42 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Monitoring and control of recombinant glycoprotein heterogeneity in
 animal cell cultures;
 N-glycosylation effect on recombinant interferon-gamma production,
 purification, and expression in CHO-23 cell culture (conference paper)
 SO Biochem.Soc.Trans.; (1995) 23, 1, 171-75
 CODEN: 9996F
 Biochemical Society, 652nd Meeting, Canterbury, UK, 6-9 September, 1994.
 AU Jenkins N
 AN 1995-07551 BIOTECHDS

L25 ANSWER 43 OF 156 MEDLINE on STN DUPLICATE 22
 TI The macroheterogeneity of recombinant human interferon-gamma produced by
 Chinese-hamster ovary cells is affected by the protein and lipid content
 of the culture medium.
 SO BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, (1995 Feb) 21 (Pt 1) 87-100.
 Journal code: 8609465. ISSN: 0885-4513.
 AU Castro P M; Ison A P; Hayter P M; Bull A T
 AN 95225997 MEDLINE

L25 ANSWER 44 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Engineering issues in applied mammalian cell culture;
 cell culture vessel design for e.g. monoclonal antibody production,
 stem cell culture and recombinant protein production; a review
 SO Australas.Biotechnol.; (1995) 5, 2, 87-91
 CODEN: 1675T ISSN: 1036-7128
 AU Marquis C
 AN 1995-09175 BIOTECHDS

L25 ANSWER 45 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Gal β 1,4GlcNAc α 2,6-sialyltransferase: Molecular cloning,
 bacterial expression and characterization
 SO RIKEN Review (1995), 8, 39-40
 CODEN: RIRÉE6; ISSN: 0919-3405
 AU Hamamoto, Toshiro
 AN 1995:552400 HCAPLUS
 DN 123:48700

L25 ANSWER 46 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Scaled-up expression of human alpha-2,6(N)-sialyltransferase in
 Saccharomyces cerevisiae;
 scale-up of human recombinant beta-galactoside-alpha-2,6-
 sialyltransferase production; potential application in
 sialyl-oligosaccharide production
 SO Biochem.Biophys.Res.Commun.; (1995) 210, 1, 14-20
 CODEN: BBRC A9 ISSN: 0006-291X
 AU Borsig L; Ivanov S X; Herrmann G F; Kragl U; Wandrey C; Berger E G
 AN 1995-07927 BIOTECHDS

L25 ANSWER 47 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
 23
 TI IN PURSUIT OF THE OPTIMAL FED-BATCH PROCESS FOR MONOCLONAL-ANTIBODY
 PRODUCTION
 SO BIOTECHNOLOGY PROGRESS, (JAN/FEB 1995) Vol. 11, No. 1, pp. 1-13.
 ISSN: 8756-7938.
 AU BIBILA T A (Reprint); ROBINSON D K
 AN 95:123719 SCISEARCH

L25 ANSWER 48 OF 156 NTIS COPYRIGHT 2004 NTIS on STN
 TI Production and Enzyme Engineering of Human Acetylcholinesterase and its
 Mutant Derivatives. Midterm rept. 15 Jan 93-15 Jul 94.
 NR AD-A288 834/5/XAB
 102p; 15 Jul 1994
 PD 15 Jul 1994

AU Shafferman, A.
AN 1995(19):06899 NTIS

L25 ANSWER 49 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Synthesis of sialylated oligosaccharide compound;
oligosaccharide production or glycosylation using trans-sialidase
AN 1994-02857 BIOTECHDS
PI EP 577580 5 Jan 1994

L25 ANSWER 50 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Nucleic acid encoding alpha-1-antichymotrypsin;
gene cloning, expression and protein engineering in e.g. Escherichia
coli for use as an antiaggregant and in pancreatitis therapy
AU Rubin H; Wang Z M; Cooperman B S; Schechter N
AN 1995-01438 BIOTECHDS
PI US 5367064 22 Nov 1994

L25 ANSWER 51 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Beta-glucosyl and beta-galactosyl transfer catalyzed by a
beta-1,4-galactosyltransferase in preparation of glycosylated alkaloids;
glycosylated alkaloid preparation using lactose-synthase and potential
application as an immunomodulator
SO J.Chem.Soc. Perkin Trans.1; (1994) 17, 2481-84
CODEN: JCPRB4
AU Kren V; Auge C; Sedmera P; Havlicek V
AN 1994-12801 BIOTECHDS

L25 ANSWER 52 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
TI HEMATOPOIETIC GROWTH-FACTORS IN PRACTICE - BENEFIT AND PROBLEM
SO BULLETIN DE L ACADEMIE NATIONALE DE MEDECINE, (03 MAY 1994) Vol. 178, No.
5, pp. 781-792.
ISSN: 0001-4079.
AU GISSELBRECHT C (Reprint)
AN 94:654134 SCISEARCH

L25 ANSWER 53 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Synthesis of glycosylated serine and threonine derivatives employing
glycosidases;
O-glycosylated serine and threonine production using Aspergillus
oryzae beta-galactosidase and Canavalia ensiformis alpha-mannosidase
SO Biotechnol.Lett.; (1994) 16, 7, 671-76
CODEN: BILED3
AU Nilsson K G I; Scigelova M
AN 1994-10597 BIOTECHDS

L25 ANSWER 54 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
25
TI PURIFICATION OF HUMAN RECOMBINANT SUPEROXIDE-DISMUTASE BY
ISOELECTRIC-FOCUSING IN A MULTICOMPARTMENT ELECTROLYZER WITH ZWITTERIONIC
MEMBRANES
SO ELECTROPHORESIS, (MAY 1994) Vol. 15, No. 5, pp. 647-653.
ISSN: 0173-0835.
AU WENISCH E; VORAUER K; JUNGBAUER A; KATINGER H; RIGHETTI P G (Reprint)
AN 94:403341 SCISEARCH

L25 ANSWER 55 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Glycosylation of recombinant proteins: problems and prospects;
pharmaceutical, etc., recombinant protein glycosylation using e.g.
glycosyltransferase after enzyme engineering; a review
SO Enzyme Microb.Technol.; (1994) 16, 5, 354-64
CODEN: EMTED2
AU Jenkins N; Curling E M A
AN 1994-06703 BIOTECHDS

L25 ANSWER 56 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
26
TI STRUCTURE, COMPOSITION, AND BIOGENESIS OF PRASINOPHYTE CELL COVERINGS
SO PROTOPLASMA, (1994) Vol. 181, No. 1-4, pp. 233-244.
ISSN: 0033-183X.
AU BECKER B; MARIN B; MELKONIAN M (Reprint)
AN 94:724476 SCISEARCH

L25 ANSWER 57 OF 156 MEDLINE on STN DUPLICATE 27
TI Effect of lipid supplements on the production and glycosylation of
recombinant interferon-gamma expressed in CHO cells.
SO CYTOTECHNOLOGY, (1994) 15 (1-3) 209-15.
Journal code: 8807027. ISSN: 0920-9069.
AU Jenkins N; Castro P; Menon S; Ison A; Bull A
AN 95200739 MEDLINE

L25 ANSWER 58 OF 156 MEDLINE on STN DUPLICATE 28
TI Recombinant soluble Fc gamma receptors: production, purification and
biological activities.
SO JOURNAL OF CHROMATOGRAPHY. B, BIOMEDICAL APPLICATIONS, (1994 Dec 9) 662
(2) 197-207.
Journal code: 9421796. ISSN: 0378-4347.
AU Sautes C; Galinha A; Bouchard C; Mazieres N; Spagnoli R; Fridman W H
AN 95235775 MEDLINE

L25 ANSWER 59 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
29
TI IDENTIFICATION OF THE U-937 MEMBRANE-ASSOCIATED PROTEINASE INTERACTING
WITH THE V3 LOOP OF HIV-1 GP120 AS CATHEPSIN-G
SO FEBS LETTERS, (23 MAY 1994) Vol. 345, No. 1, pp. 81-86.
ISSN: 0014-5793.
AU AVRIL L E; DIMARTINOFERRER M; PIGNEDE G; SEMAN M; GAUTHIER F (Reprint)
AN 94:338571 SCISEARCH

L25 ANSWER 60 OF 156 MEDLINE on STN DUPLICATE 30
TI Expression of mouse Gal beta 1,4GlcNAc alpha 2,6-sialyltransferase in an
insoluble form in Escherichia coli and partial renaturation.
SO BIOORGANIC AND MEDICINAL CHEMISTRY, (1994 Feb) 2 (2) 79-84.
Journal code: 9413298. ISSN: 0968-0896.
AU Hamamoto T; Lee Y C; Kurosawa N; Nakaoka T; Kojima N; Tsuji S
AN 95006421 MEDLINE

L25 ANSWER 61 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
31
TI PURIFICATION OF BIOLOGICALLY-ACTIVE SPARC EXPRESSED IN
SACCHAROMYCES-CEREVISIAE
SO ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (OCT 1994) Vol. 314, No. 1, pp.
50-63.
ISSN: 0003-9861.
AU YOST J C; BELL A; SEALE R; SAGE E H (Reprint)
AN 94:674971 SCISEARCH

L25 ANSWER 62 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
32
TI SYNTHETIC STUDIES OF CELLULOSE .11. HIGH-YIELD SYNTHESIS OF A
CELLOTETRAOSE DERIVATIVE BY A CONVERGENT SYNTHETIC METHOD FROM AN ACYL
GLUCOSE DERIVATIVE
SO MOKUZAI GAKKAISHI, (1994) Vol. 40, No. 1, pp. 44-49.
ISSN: 0021-4795.
AU NISHIMURA T (Reprint); NAKATSUBO F; MURAKAMI K
AN 94:182812 SCISEARCH

L25 ANSWER 63 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
TI COMBINED CHEMICAL AND ENZYMATIC LARGE-**SCALE** SYNTHESIS OF

SIALYL LEWISX OLIGOSACCHARIDES

SO ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, (21 AUG 1994) Vol.
208, Part 1, pp. 16-CARB.
ISSN: 0065-7727.
AU BU S (Reprint); BAYER R; JIANG C; NORBERG T; RATCLIFFE R M; REEVES R;
WALKER L; WEIMER S
AN 94:583830 SCISEARCH

L25 ANSWER 64 OF 156 MEDLINE on STN DUPLICATE 33
TI Glycosylation of recombinant human granulocyte colony stimulating factor:
implications for stability and potency.
SO EUROPEAN JOURNAL OF CANCER, (1994) 30A Suppl 3 S12-4.
Journal code: 9005373. ISSN: 0959-8049.
AU Nissen C
AN 95209924 MEDLINE

L25 ANSWER 65 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
TI GLYCOSYLATION OF RECOMBINANT HUMAN GRANULOCYTE-COLONY-STIMULATING FACTOR -
IMPLICATIONS FOR STABILITY AND POTENCY
SO EUROPEAN JOURNAL OF CANCER, (1994) Vol. 30A, Supp. 3, pp. S12-S14.
ISSN: 0964-1947.
AU NISSEN C (Reprint)
AN 94:780515 SCISEARCH

L25 ANSWER 66 OF 156 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN
TI Glycosylation of recombinant human granulocyte colony stimulating factor:
Implications for stability and potency
SO European Journal of Cancer Part A: General Topics, (1994), 30/SUPPL. 3
(S12-S14)
CODEN: EJCTEA ISSN: 0959-8049
AU Nissen C.
AN 1994:24345435 BIOTECHNO

L25 ANSWER 67 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Sialidase activity during Chinese hamster ovary batch culture and its
effect on glycoprotein product quality;
effect of CHO cell culture supernatant sialidase activity on human
recombinant antithrombin-III glycoprotein quality (conference
abstract)
SO Cytotechnology; (1994) 14, Suppl.1, 3.14
CODEN: 3514D ISSN: 0920-9069
Animal Cell Technology: Developments Towards the 21st Century, Veldhoven,
The Netherlands, 14-16 September, 1994.
AU Munzert E; Muething J; Buentemeyer H; Lehmann J
AN 1995-06316 BIOTECHDS

L25 ANSWER 68 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Effects of lipids on recombinant interferon-gamma glycosylation, and
improvements in product monitoring;
in CHO cell culture (conference abstract)
SO Cytotechnology; (1994) 14, Suppl.1, 3.3
CODEN: 3514D ISSN: 0920-9069
Animal Cell Technology: Developments Towards the 21st Century, Veldhoven,
The Netherlands, 14-16 September, 1994.
AU Jenkins N; Castro P; Ison A; Bull A; Freedman R; James D
AN 1995-05660 BIOTECHDS

L25 ANSWER 69 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Production and post-translational modification of tPA in Namalwa cells;
tissue plasminogen-activator expression in CHO and Namalwa cell
culture; N-glycosylation (conference abstract)
SO Cytotechnology; (1994) 14, Suppl.1, 3.9
CODEN: 3514D ISSN: 0920-9069
Animal Cell Technology: Developments Towards the 21st Century, Veldhoven,

The Netherlands, 14-16 September, 1994.
AU Khan M W; Musgrave S C; Jenkins N
AN 1995-06314 BIOTECHDS

L25 ANSWER 70 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Glycosylation of recombinant therapeutic proteins;
recombinant protein production in animal cell culture; process
validation (conference abstract)
SO Cytotechnology; (1994) 14, Suppl.1, 3.4
CODEN: 3514D ISSN: 0920-9069
Animal Cell Technology: Developments Towards the 21st Century, Veldhoven,
The Netherlands, 14-16 September, 1994.
AU Parekh R B
AN 1995-05661 BIOTECHDS

L25 ANSWER 71 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Combined chemical and enzymatic large **scale** synthesis of
sialyl Lewis-X oligosaccharides;
for use as antiinflammatory drugs (conference abstract)
SO Abstr.Pap.Am.Chem.Soc.; (1994) 208 Meet., Pt.1, CARB16
CODEN: ACSRAL ISSN: 0065-7727
American Chemical Society, 208th Meeting, Washington, DC, 21-25 August,
1994.
AU Bu S; Bayer R; Jiang C; Norberg T; Ratcliffe R M; Reeves R; Walker L;
Weimer S
AN 1995-05731 BIOTECHDS

L25 ANSWER 72 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Large-scale displacement chromatography of a synthetic peptide;
protein purification after glycosylation (conference abstract)
SO Abstr.Pap.Am.Chem.Soc.; (1994) 207 Meet., Pt.2, BTEC70
CODEN: ACSRAL
AU Antia F D
AN 1994-08340 BIOTECHDS

L25 ANSWER 73 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Immobilized anti-hemoglobin (Hb) antibody and labeled anti-glycosylated
hemoglobin (Alc) antibody for glycosylated hemoglobin determination
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
IN Uchida, Yoshiaki; Kurano, Yoshihiro; Tanaka, Aiko; Tanimoto, Tetsuji
AN 1994:49580 HCAPLUS
DN 120:49580

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05249110	A2	19930928	JP 1991-359266	19911230

L25 ANSWER 74 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Fibroblast growth factor (FGF) analogs with modified glycosidation and
their manufacture
SO Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
IN Sasada, Reiko; Senoo, Shoji; Igarashi, Koichi
AN 1993:552848 HCAPLUS
DN 119:152848

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05076356	A2	19930330	JP 1991-127435	19910530

L25 ANSWER 75 OF 156 MEDLINE on STN DUPLICATE 35
TI Expression of glycosylated and nonglycosylated human transferrin in
mammalian cells. Characterization of the recombinant proteins with
comparison to three commercially available transferrins.
SO BIOCHEMISTRY, (1993 May 25) 32 (20) 5472-9.

Journal code: 0370623. ISSN: 0006-2960.

AU Mason A B; Miller M K; Funk W D; Banfield D K; Savage K J; Oliver R W;
Green B N; MacGillivray R T; Woodworth R C
AN 93271170 MEDLINE

L25 ANSWER 76 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Aldolases and transferases in sialic acids chemistry and biochemistry;
sialyl-aldolase and sialyltransferase application in e.g.
tumor-associated antigen precursor production and glycosylation
modification (conference abstract)
SO J.Chem.Technol.Biotechnol.; (1993) 56, 4, 419
CODEN: JCTBDC
AU Auge C; Gautheron-Le Narvor C; Lubineau A
AN 1993-05240 BIOTECHDS

L25 ANSWER 77 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
TI BLOOD-GLUCOSE CONTROL IN DIABETICS .1.
SO SEMINARS IN DIALYSIS, (NOV/DEC 1993) Vol. 6, No. 6, pp. 392-393.
ISSN: 0894-0959.
AU DIAZBUXO J A (Reprint)
AN 93:707523 SCISEARCH

L25 ANSWER 78 OF 156 MEDLINE on STN DUPLICATE 36
TI Measurement of non-enzymic glycosylation with a radiochemical assay.
SO INTERNATIONAL JOURNAL OF BIOCHEMISTRY, (1993 Mar) 25 (3) 379-84.
Journal code: 0250365. ISSN: 0020-711X.
AU Sheikh M A; Robb D A
AN 93215902 MEDLINE

L25 ANSWER 79 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
37
TI EFFECT OF KAPPA-CASEIN GLYCOSYLATION ON CHEESE YIELDING CAPACITY AND
COAGULATING PROPERTIES OF MILK
SO FOOD RESEARCH INTERNATIONAL, (1993) Vol. 26, No. 5, pp. 365-369.
ISSN: 0963-9969.
AU ROBITAILLE G (Reprint); NGKWAIHANG K F; MONARDES H G
AN 93:602956 SCISEARCH

L25 ANSWER 80 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Changes in the glycosylation of interferon- γ during culture
SO Anim. Cell Technol.: Basic Appl. Aspects, Proc. Int. Meet. Jpn. Assoc.
Anim. Cell Technol., 5th (1993), Meeting Date 1992, 231-5. Editor(s):
Kaminogawa, Shuichi; Ametani, Akio; Hachimura, Satoshi. Publisher: Kluwer,
Dordrecht, Neth.
CODEN: 60AEAM
AU Jenkins, N.; Wingrove, C.; Strange, P.; Baines, A.; Curling, E.; Freedman,
R.; Pucci, P.
AN 1994:321151 HCAPLUS
DN 120:321151

L25 ANSWER 81 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Development of enzymes for chemoenzymatic synthesis;
oligosaccharide and peptide preparation; characterization of
enzyme-catalyzed reactions, enzyme gene cloning and enzyme
engineering; a review (conference paper)
SO Chimia; (1993) 47, 4, 127-32
CODEN: CHIMAD
AU Wong C H
AN 1993-14752 BIOTECHDS

L25 ANSWER 82 OF 156 MEDLINE on STN DUPLICATE 38
TI [Expression of recombinant proteins in the milk of transgenic animals].
Expression de proteines recombinantes dans le lait d'animaux
transgeniques.

SO REVUE FRANCAISE DE TRANSFUSION ET D HEMOBIOLOGIE, (1993 Jan) 36 (1) 49-72.
 Ref: 85
 Journal code: 8908966. ISSN: 1140-4639.
 AU Houdebine L M
 AN 93236665 MEDLINE

L25 ANSWER 83 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Expression, purification and crystallization of fully active, glycosylated
 human interleukin-5
 SO FEBS Letters (1993), 331(1-2), 49-52
 CODEN: FEBLAL; ISSN: 0014-5793
 AU Guisez, Yves; Oefner, Christian; Winkler, Fritz K.; Schlaeger,
 Ernst-Juergen; Zulauf, Martin; Van der Heyden, Jose; Plaetinck, Geert;
 Cornelis, Sigrid; Tavernier, Jan; et al.
 AN 1993:624390 HCAPLUS
 DN 119:224390

L25 ANSWER 84 OF 156 LIFESCI COPYRIGHT 2004 CSA on STN
 TI Structure and biogenesis of the extracellular matrix in thecate
 prasinophytes.
 SO J. PHYCOL., (1993) vol. 29, no. 3 Suppl., p. 17. Abstract only..
 Meeting Info.: 1993 Meeting of the Phycological Society of America. Ames,
 IA (USA). 1-5 Aug 1993.
 ISSN: 0022-3646.
 AU Becker, B.; Boelinger, B.; Melkonian, M.
 AN 93:88040 LIFESCI

L25 ANSWER 85 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Chemoenzymic synthesis of a glycosphingolipid
 SO Journal of the Chemical Society, Chemical Communications (1992), (20),
 1526-7
 CODEN: JCCCAT; ISSN: 0022-4936
 AU Guilbert, Benedicte; Khan, Tariq H.; Flitsch, Sabine L.
 AN 1993:60004 HCAPLUS
 DN 118:60004

L25 ANSWER 86 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
 TI A CONVENIENT AND STEREOSELECTIVE SYNTHESIS OF 2'-DEOXY-BETA-L-
 RIBONUCLEOSIDES
 SO NUCLEOSIDES AND NUCLEOTIDES, (1992) Vol. 11, No. 2-4, pp. 341-349.
 ISSN: 0732-8311.
 AU FUJIMORI S; IWANAMI N; HASHIMOTO Y; SHUDO K (Reprint)
 AN 92:318441 SCISEARCH

L25 ANSWER 87 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
 39
 TI GLUCOSE-LIMITED CHEMOSTAT CULTURE OF CHINESE-HAMSTER OVARY CELLS PRODUCING
 RECOMBINANT HUMAN INTERFERON-GAMMA
 SO BIOTECHNOLOGY AND BIOENGINEERING, (05 FEB 1992) Vol. 39, No. 3, pp.
 327-335.
 ISSN: 0006-3592.
 AU HAYTER P M (Reprint); CURLING E M A; BAINES A J; JENKINS N; SALMON I;
 STRANGE P G; TONG J M; BULL A T
 AN 92:64158 SCISEARCH

L25 ANSWER 88 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Recombinant human IFN-gamma produced by CHO cells: effects of culture
 environment on product quality;
 human recombinant interferon-gamma production in CHO cell culture,
 glycosylation and glycosylated protein purification by cation-exchange
 chromatography (conference paper)
 SO Harnessing Biotechnol.21st Century; (1992) 308-10
 CODEN: 9999V
 AU Curling E; Hayter P; Jenkins N

AN 1994-03116 BIOTECHDS

L25 ANSWER 89 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
41

TI MEMORY PERFORMANCE OF YOUNG AND OLD SUBJECTS RELATED TO THEIR ERYTHROCYTE
CHARACTERISTICS

SO EXPERIMENTAL GERONTOLOGY, (1992) Vol. 27, No. 3, pp. 275-285.
ISSN: 0531-5565.

AU DANON D (Reprint); BOLOGNA N B; GAVENDO S

AN 92:318699 SCISEARCH

L25 ANSWER 90 OF 156 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI ENZYME-CATALYZED OLIGOSACCHARIDE SYNTHESIS.

SO Analytical Biochemistry, (1992) Vol. 202, No. 2, pp. 215-238.
CODEN: ANBCA2. ISSN: 0003-2697.

AU ICHIKAWA Y [Reprint author]; LOOK G C; WONG C-H

AN 1992:322422 BIOSIS

L25 ANSWER 91 OF 156 MEDLINE on STN DUPLICATE 42

TI The use of porcine liver (2---3)-alpha-**sialyltransferase** in the
large-**scale** synthesis of alpha-Neup5Ac-(2---3)-beta-D-Galp-(1---
-3)-D-GlcpNAc, the epitope of the tumor-associated carbohydrate antigen CA
50.

SO CARBOHYDRATE RESEARCH, (1992 Apr 10) 228 (1) 137-44.
Journal code: 0043535. ISSN: 0008-6215.

AU Lubineau A; Auge C; Francois P

AN 92386536. MEDLINE

L25 ANSWER 92 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI The use of porcine liver (2-3)-alpha-**sialyltransferase** in the
large-**scale** synthesis of alpha-Neup5Ac-(2-3)-beta-D-Galp-(1-3)-
D-GlcpNAc, the epitope of the tumor-associated carbohydrate antigen
CA-50;
human pancreas adenocarcinoma tumor-associated antigen preparation
using beta-D-Galp-(1-3)-D-GalpNAc: CMP-Neup5Ac-(2-3)-alpha-
sialyltransferase

SO Carbohydr. Res.; (1992) 288, 1, 137-44
CODEN: CRBRAT

AU Lubineau A; *Auge C; Francois P

AN 1992-11841 BIOTECHDS

L25 ANSWER 93 OF 156 MEDLINE on STN DUPLICATE 43

TI Psychosocial and psychopathologic influences on management and control of
insulin-dependent diabetes.

SO INTERNATIONAL JOURNAL OF PSYCHIATRY IN MEDICINE, (1992) 22 (2) 105-17.
Journal code: 0365646. ISSN: 0091-2174.

AU Eaton W W; Mengel M; Mengel L; Larson D; Campbell R; Montague R B

AN 92387853 MEDLINE

L25 ANSWER 94 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Assay of sialyltransferase activity by reversed-phase ion-pair
high-performance liquid chromatography

SO Journal of Chromatography (1992), 573(1), 23-7
CODEN: JOCRAM; ISSN: 0021-9673

AU Spiegel, Leonard B.; Hadjimichael, Jane; Rossomando, Edward F.

AN 1992:54128 HCAPLUS

DN 116:54128

L25 ANSWER 95 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI Glycosylation of a recombinant monoclonal antibody expressed in several
cell lines;
humanized antibody characterization (conference abstract)

SO Abstr. Pap. Am. Chem. Soc.; (1992) 203 Meet., Pt. 1, BIOT56
CODEN: ACSRAL

AU Yu Ip C C; Miller W J; Oliver C N; Krips D M; Aunins J G; Cuca G
AN 1992-08353 BIOSIS

L25 ANSWER 96 OF 156 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI **GLYCOSYLATION** BY USE OF GLYCOHYDROLASES AND GLYCOSYLTRANSFERASES
IN PREPARATIVE **SCALE**.
SO ACS Symp. Ser., (1991) pp. 63-78. BEDNARSKI, M. D. AND E. S. SIMON (ED.).
ACS (AMERICAN CHEMICAL SOCIETY) SYMPOSIUM SERIES, 466. ENZYMES IN
CARBOHYDRATE SYNTHESIS; 199TH NATIONAL MEETING, BOSTON, MASSACHUSETTS,
USA, APRIL 22-27, 1990. XI+131P. AMERICAN CHEMICAL SOCIETY: WASHINGTON,
D.C., USA. ILLUS.
Publisher: Series: ACS Symposium Series.
CODEN: ACSMC8. ISSN: 0097-6156. ISBN: 0-8412-2097-2.
AU STANGIER P [Reprint author]; THIEM J
AN 1992:153714 BIOSIS

L25 ANSWER 97 OF 156 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 44
TI Analysis of **glycosylation** heterogeneity in IFN-alpha produced by
CHO cells during **batch** and continuous culture.
SO Conradt, H. S. [Editor]. GBF Monographs, (1991) pp. 269-274. GBF
Monographs; Protein glycosylation: Cellular, biotechnological and
analytical aspects.
Publisher: VCH Verlagsgesellschaft mbH, Postfach 10 11 61, Boschstrasse
12, D-6940 Weinheim, Germany; VCH Publishers, Inc., Suite 909, 220 East
23rd Street, New York, New York 10010, USA. Series: GBF Monographs.
Meeting Info.: International Workshop on Protein Glycosylation.
Braunschweig, Germany. June 28-30, 1990.
ISSN: 0930-4320. ISBN: 3-527-28367-6, 1-56081-184-6.
AU Curling, E. M. A.; Hayter, P.; Tong, J.; Jenkins, N.; Samon, I.; Bull, A.
T.
AN 1993:356595 BIOSIS

L25 ANSWER 98 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Oligosaccharide structures of glycoproteins from recombinant mammalian
cell lines
SO GBF Monographs (1991), 15 (Protein Glycosylation: Cell., Biotechnol. Anal.
Aspects), 235-48
CODEN: GBMOEB; ISSN: 0930-4320
AU Nimtz, Manfred; Conradt, Harald S.
AN 1993:75692 HCAPLUS
DN 118:75692

L25 ANSWER 99 OF 156 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI EVALUATION FOR THE CARBOHYDRATE ANTIGEN 19-9 CA-19-9 RADIOIMMUNOASSAY KIT
WITH THE NEW MONOCLONAL ANTIBODY B25.10 FUNDAMENTAL OF ITS METHOD AND
CUT-OFF LEVELS.
SO Journal of the Kurume Medical Association, (1991) Vol. 54, No. 2-3, pp.
217-225.
CODEN: KIZAAL. ISSN: 0368-5810.
AU FUKE T [Reprint author]; RYU H; IWANAGA Y; HASHIMOTO M; KONDO S; SAKAI K;
YAMASHITA Y; KAKEGAWA T
AN 1991:433559 BIOSIS

L25 ANSWER 100 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Studies on stabilization of amylase by covalent coupling to soluble
polysaccharides
SO Enzyme and Microbial Technology (1991), 13(2), 164-70
CODEN: EMTED2; ISSN: 0141-0229
AU Srivastava, Rai Ajit K.
AN 1991:97307 HCAPLUS
DN 114:97307

L25 ANSWER 101 OF 156 MEDLINE on STN

TI A modified quality-of-life measure for youths: psychometric properties.
 SO DIABETES EDUCATOR, (1991 Mar-Apr) 17 (2) 114-8.
 Journal code: 7701401. ISSN: 0145-7217.
 AU Ingersoll G M; Marrero D G
 AN 91138475 MEDLINE

L25 ANSWER 102 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
 TI **GLYCOSYLATION** BY USE OF GLYCOHYDROLASES AND GLYCOSYLTRANSFERASES
 IN PREPARATIVE **SCALE**
 SO ACS SYMPOSIUM SERIES, (1991) Vol. 466, pp. 63-78.
 AU STANGIER P (Reprint); THIEM J
 AN 91:468272 SCISEARCH

L25 ANSWER 103 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI **Glycosylation** by the use of glycohydrolases and
 glycosyltransferases in a preparative **scale**
 SO ACS Symposium Series (1991), 466(Enzymes Carbohydr. Synth.), 63-78
 CODEN: ACSMC8; ISSN: 0097-6156
 AU Stangier, Peter; Thiem, Joachim
 AN 1991:630388 HCAPLUS
 DN 115:230388

L25 ANSWER 104 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Production of human interleukin-3 using industrial microorganisms;
 vector plasmid pGB/IL-322, plasmid pGB/IL-326 construction for protein
 secretion without **glycosylation** in *Bacillus licheniformis*;
 low-cost, large-**scale** production and purification
 SO Bio/Technology; (1991) 9, 1, 47-52
 CODEN: BTCHDA
 AU van Leen R W; Bakhuis J G; van Beckhoven R F W C; Burger H; Dorssers L C
 J; Hommes R W J
 AN 1991-02622 BIOTECHDS

L25 ANSWER 105 OF 156 MEDLINE on STN DUPLICATE 45
 TI Recombinant human interferon-gamma. Differences in **glycosylation**
 and proteolytic processing lead to heterogeneity in **batch**
 culture.
 SO BIOCHEMICAL JOURNAL, (1990 Dec 1) 272 (2) 333-7.
 Journal code: 2984726R. ISSN: 0264-6021.
 AU Curling E M; Hayter P M; Baines A J; Bull A T; Gull K; Strange P G;
 Jenkins N
 AN 91097442 MEDLINE

L25 ANSWER 106 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Regulated overproduction and secretion of yeast carboxypeptidase Y
 SO Applied Microbiology and Biotechnology (1990), 33(3), 307-12
 CODEN: AMBIDG; ISSN: 0175-7598
 AU Nielsen, Trine L.; Holmberg, Steen; Petersen, Jens G. L.
 AN 1990:513777 HCAPLUS
 DN 113:113777

L25 ANSWER 107 OF 156 MEDLINE on STN DUPLICATE 46
 TI The use of immobilised glycosyltransferases in the synthesis of
 sialyloligosaccharides.
 SO CARBOHYDRATE RESEARCH, (1990 Apr 25) 200 257-68.
 Journal code: 0043535. ISSN: 0008-6215.
 AU Auge C; Fernandez-Fernandez R; Gautheron C
 AN 90335877 MEDLINE

L25 ANSWER 108 OF 156 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
 RESERVED. on STN
 TI Effects of parental relaxation training on glycosylated hemoglobin of
 children with diabetes.
 SO Patient Education and Counseling, (1990) 16/3 (247-253).

ISSN: 0738-3991 CODEN: PEDCDF

AU Guthrie D.W.; Sargent L.; Speelman D.; Parks L.
AN 91002905 EMBASE

L25 ANSWER 109 OF 156 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 47

TI SYNTHESIS OF CMP-NEU5AC AND NEU5AC-ALPHA-2-3GAL-BETA-1-3GALNAC-ALPHA-OET
WITH CYTIDINE-5'-MONOPHOSPHOSIALATE SYNTHASE AND BETA-D GALACTOSIDE
ALPHA-2-3-SIALYLTRANSFERASE IMMOBILIZED TO TRESYL CHLORIDE ACTIVATED
AGAROSE.

SO Methods in Molecular and Cellular Biology, (1990) Vol. 1, No. 5-6, pp.
195-202.

CODEN: MMCBEV. ISSN: 0898-7750.

AU NILSSON K G I [Reprint author]; GUDMUNDSSON B-M E
AN 1992:962 BIOSIS

L25 ANSWER 110 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI What should be focused in the study of cell culture technology for
production of bioactive proteins;

mammal cell culture for large-scale pharmaceutical production

SO Cytotechnology; (1990) 3, 1, 3-7

AU Murakami H

AN 1990-07791 BIOTECHDS

L25 ANSWER 111 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI Fermentation of recombinant Saccharomyces cerevisiae for production of
single-chain urinary plasminogen-activator;

urokinase production in batch culture (conference abstract)

SO Abstr.Pap.Am.Chem.Soc.; (1990) 199 Meet., Pt.1, BIOT103

CODEN: ACSRAL

AU Turner B G; Avgerinos G C; Melnick L M; Moir D T; Davidow L S

AN 1990-09349 BIOTECHDS

L25 ANSWER 112 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI Prospects for large-scale enzymatic synthesis of sialosides;
sialo-oligosaccharide preparation using sialyltransferase;

glycosylation (conference abstract)

SO Abstr.Pap.Am.Chem.Soc.; (1990) 199 Meet., Pt.1, CARB61

CODEN: ACSRAL

AU Paulson J C

AN 1990-10131 BIOTECHDS

L25 ANSWER 113 OF 156 LIFESCI COPYRIGHT 2004 CSA on STN DUPLICATE 48

TI Glycosylation patterns in recombinant gamma -interferon secreted by CHO
cells.

ADVANCES IN ANIMAL CELL BIOLOGY AND TECHNOLOGY FOR BIOPROCESSES.

SO (1989) pp. 497-499.

Meeting Info.: 9. General Meeting of the European Society for Animal Cell
Technology. Knokke (Belgium). 1988.

ISBN: 0-407-01499-3.

AU Curling, E.M.A.; Wilcox, M.; Furlotte, D.; Hayter, P.M.; Spier, R.E.
[editor]; Griffiths, J.B. [editor]; Stephenne, J. [editor]; Crooy, P.J.
[editor]

AN 89:89216 LIFESCI

L25 ANSWER 114 OF 156 MEDLINE on STN DUPLICATE 49

TI Non-enzymatic glycosylation.

SO BRITISH MEDICAL BULLETIN, (1989 Jan) 45 (1) 174-90. Ref: 51

Journal code: 0376542. ISSN: 0007-1420.

AU Kennedy L; Lyons T J

AN 90002114 MEDLINE

L25 ANSWER 115 OF 156 MEDLINE on STN DUPLICATE 50

TI Serological responses in cats vaccinated with FeLV ISCOM and an

inactivated FeLV vaccine.
SO VACCINE, (1989 Apr) 7 (2) 137-41.
Journal code: 8406899. ISSN: 0264-410X.
AU Osterhaus A; Weijer K; UytdeHaag F; Knell P; Jarrett O; Akerblom L; Morein B
AN 89319150 MEDLINE

L25 ANSWER 116 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Constitutive long-term production of recombinant human interferon-gamma
by recombinant mouse C127 cells cultured in serum-free medium;
mouse C127 cell culture immobilized on microcarrier (conference
abstract)
SO J.Interferon Res.; (1989) 9, Suppl.2, S195
CODEN: JIREDJ
AU Sano E; Sawada R; Kasama K; Shimizu H; Kobayashi S
AN 1989-14931 BIOTECHDS

L25 ANSWER 117 OF 156 MEDLINE on STN DUPLICATE 51
TI Constitutive long-term production and characterization of recombinant
human interferon-gammas from two different mammalian cells.
SO CELL STRUCTURE AND FUNCTION, (1988 Apr) 13 (2) 143-59.
Journal code: 7608465. ISSN: 0386-7196.
AU Sano E; Okano K; Sawada R; Naruto M; Sudo T; Kamata K; Iizuka M; Kobayashi S
AN 88253448 MEDLINE

L25 ANSWER 118 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Genetic engineering and trends in research in new vaccines;
e.g. expression of hepatitis B virus gene S in Saccharomyces
cerevisiae
SO C.R.Seances Soc.Biol.Ses Fil.; (1988) 182, 2, 141-57
CODEN: CRSBAW
AU Hofnung M
AN 1989-00235 BIOTECHDS

L25 ANSWER 119 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Glycosylation and processing of high levels of active human
glucocerebrosidase in invertebrate cells using a baculo virus expression
vector;
Autographa californica nuclear-polyhedrosis virus; potential
large-scale recombinant enzyme preparation
SO DNA; (1988) 7, 2, 99-106
CODEN: DNAADR
AU Martin B M; Tsuji S; LaMarca M E; Maysak K; Eliason W; Ginns E I
AN 1988-05551 BIOTECHDS

L25 ANSWER 120 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Lectins in the isolation of receptors on lymphocytes
SO Methods in Enzymology (1987), 150(Immunochem. Tech., Pt. K), 463-77
CODEN: MENZAU; ISSN: 0076-6879
AU Marchalonis, John J.
AN 1988:148443 HCAPLUS
DN 108:148443

L25 ANSWER 121 OF 156 MEDLINE on STN DUPLICATE 52
TI Biotin binding to avidin. Oligosaccharide side chain not required for
ligand association.
SO BIOCHEMICAL JOURNAL, (1987 Nov 15) 248 (1) 167-71.
Journal code: 2984726R. ISSN: 0264-6021.
AU Hiller Y; Gershoni J M; Bayer E A; Wilchek M
AN 88133839 MEDLINE

L25 ANSWER 122 OF 156 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
RESERVED. on STN

TI Glycosylated plasma protein measurement by a semi-automated method.
 SO Annals of Clinical Biochemistry, (1986) 23/2 (198-203).
 CODEN: ACBOBU
 AU Moore J.C.; Outlaw M.C.; Barnes A.J.; Turner R.C.
 AN 86088924 EMBASE

L25 ANSWER 123 OF 156 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
 RESERVED. on STN
 TI The measurement of glycosylated albumin by reduction of alkaline
 nitro-blue tetrazolium.
 SO Clinica Chimica Acta, (1986) 156/2 (197-206).
 CODEN: CCATAR
 AU Walker S.W.; Howie A.F.; Smith A.F.
 AN 86226697 EMBASE

L25 ANSWER 124 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Use of eukaryotic fungal and algal cells for expression of foreign genes;
 vector construction for herpes simplex virus thymidine-kinase cloning,
 protein secretion in Achlya and Chlamydomonas cells (conference
 abstract)
 SO Genet.Exchang; (1986) Genet.Transformation Eur. 8 Meet., 68
 AU Leung W C; Manavathu E; Zwaagstra J; Suryanarayana K; Hasnain S E; Leung
 M F K
 AN 1988-00683 BIOTECHDS

L25 ANSWER 125 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Glycosylated hemoglobin: technical remarks
 SO Lab (Milan) (1985), 12(3), 241-52
 CODEN: LABMDV; ISSN: 0390-069X
 AU Ravazzani, V.; Angeli, M.; Bo, A.; Grisler, R.
 AN 1986:65094 HCAPLUS
 DN 104:65094

L25 ANSWER 126 OF 156 MEDLINE on STN DUPLICATE 53
 TI Affinity chromatography: a precise method for glycosylated albumin
 estimation.
 SO ANNALS OF CLINICAL BIOCHEMISTRY, (1985 Jan) 22 (Pt 1) 79-83.
 Journal code: 0324055. ISSN: 0004-5632.
 AU John W G; Jones A E
 AN 85173127 MEDLINE

L25 ANSWER 127 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Quality of the analysis of glycosylated hemoglobins
 SO Tijdschrift van de Nederlandse Vereniging voor Klinische Chemie (1985),
 10(1), 16-19
 CODEN: TNVCE9; ISSN: 0168-8472
 AU Weykamp, C. W.
 AN 1985:163302 HCAPLUS
 DN 102:163302

L25 ANSWER 128 OF 156 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 TI AUTOMATED FLUOROMETRIC DETERMINATION OF FURFURALS.
 SO Analytical Biochemistry, (1985) Vol. 144, No. 1, pp. 6-14.
 CODEN: ANBCA2. ISSN: 0003-2697.
 AU LEVER M [Reprint author]; MAY P C; ANDRE C M
 AN 1985:312053 BIOSIS

L25 ANSWER 129 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Synthesis with immobilized enzymes of two trisaccharides; one of them
 active as the determinant of a stage antigen;
 immobilization of 5 enzymes
 SO Tetrahedron Lett.; (1984) 25, 14, 1467-70
 AU Auge C; David S; Mathieu C; Gautheron C
 AN 1984-05297 BIOTECHDS

L25 ANSWER 130 OF 156 MEDLINE on STN DUPLICATE 54
 TI Comparison of five **commercial** kits for the determination of
glycosylated haemoglobin.
 SO JOURNAL OF CLINICAL PATHOLOGY, (1984 Oct) 37 (10) 1177-81.
 Journal code: 0376601. ISSN: 0021-9746.
 AU Norcliffe D; Turner E M
 AN 85031129 MEDLINE

L25 ANSWER 131 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
 TI COMPARISON OF 5 **COMMERCIAL** KITS FOR THE DETERMINATION OF
GLYCOSYLATED HEMOGLOBIN
 SO JOURNAL OF CLINICAL PATHOLOGY, (1984) Vol. 37, No. 10, pp. 1177-1181.
 AU NORCLIFFE D (Reprint); TURNER E M
 AN 84:535647 SCISEARCH

L25 ANSWER 132 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Ion-exchange system and method for isolation and determination of
 glycosylated hemoglobin in human blood
 SO PCT Int. Appl., 23 pp.
 CODEN: PIXXD2
 IN Sanders, James Lynn
 AN 1984:3084 HCAPLUS
 DN 100:3084

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8303476	A1	19831013	WO 1982-US288	19820325
	W: JP, SU				
	RW: FR				
	EP 104165	A1	19840404	EP 1982-901224	19820325
	R: FR				

L25 ANSWER 133 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Stable glycosylated hemoglobin as measured by a microcolumn method
 SO Clinical Chemistry (Washington, DC, United States) (1983), 29(9), 1687-8
 CODEN: CLCHAU; ISSN: 0009-9147
 AU Carenini, Angelo; Mosca, Andrea; Pozza, Guido
 AN 1983:536310 HCAPLUS
 DN 99:136310

L25 ANSWER 134 OF 156 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
 RESERVED. on STN
 TI Age-related changes in non-enzymatic glycosylation of human basement
 membranes.
 SO Experimental Gerontology, (1983) 18/6 (461-469).
 CODEN: EXGEAB
 AU Cohen M.P.; Yu-Wu V.
 AN 84079878 EMBASE

L25 ANSWER 135 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI An inexpensive, rapid and precise affinity chromatography method for the
 measurement of glycosylated hemoglobins
 SO Annals of Clinical Biochemistry (1983), 20(3), 129-35
 CODEN: ACBOBU; ISSN: 0004-5632
 AU Hall, Pauline M.; Cook, J. G. H.; Gould, B. J.
 AN 1983:419063 HCAPLUS
 DN 99:19063

L25 ANSWER 136 OF 156 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
 RESERVED. on STN
 TI On the importance of a prolonged dialysis for haemoglobin A(Ic)
 determination.
 SO Clinica Chimica Acta, (1982) 121/3 (393-397).
 CODEN: CCATAR

AU Maquart F.-X.; Poynard J.-P.; Leutenegger M.; Borel J.-P.
AN 82148306 EMBASE

L25 ANSWER 137 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Glucosylation of extrinsic compounds by various plant cell cultures;
production of pharmacologically useful glucosides by e.g. *Lithispermum*
erythrorhizon *Perilla frutescens* *Catharanthus roseus* and *Datura innoxia*
(conference paper)
SO Plant Tissue Cultur; (1982) 5 Meet., 383-84
AU Umetani Y; Tanaka S; Tabata M
AN 1984-07113 BIOTECHDS

L25 ANSWER 138 OF 156 MEDLINE on STN DUPLICATE 55
TI Comparison of four commercial methods for the determination of fast
hemoglobins.
SO CLINICAL BIOCHEMISTRY, (1982 Aug) 15 (4) 230-3.
Journal code: 0133660. ISSN: 0009-9120.
AU Lee L P; Arnott B; Feng M; Hynie I
AN 83025558 MEDLINE

L25 ANSWER 139 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Measurement of glycosylated hemoglobins using an affinity chromatography
method
SO Clinica Chimica Acta (1982), 125(1), 41-8
CODEN: CCATAR; ISSN: 0009-8981
AU Gould, Barry J.; Hall, Pauline M.; Cook, John G. H.
AN 1983:2389 HCAPLUS
DN 98:2389

L25 ANSWER 140 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Studies of glycosylated hemoglobin (Hb-A1) by columns
SO Eisei Kensa (1981), 30(8), 1061-3
CODEN: EIKEAS; ISSN: 0367-052X
AU Iwata, Minoru
AN 1982:65066 HCAPLUS
DN 96:65066

L25 ANSWER 141 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
56
TI EFFECT OF TEMPERATURE ON **GLYCOSYLATED** HEMOGLOBIN DETERMINATION
BY 2 **COMMERCIAL** KITS
SO CLINICAL CHEMISTRY, (1981) Vol. 27, No. 6, pp. 1051.
AU SANDHU R S (Reprint); FISCHMAN S J
AN 81:284703 SCISEARCH

L25 ANSWER 142 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
57
TI RAPID-DETERMINATION OF **GLYCOSYLATED** HEMOGLOBINS BY A
BATCH PROCEDURE
SO JOURNAL OF CLINICAL CHEMISTRY AND CLINICAL BIOCHEMISTRY, (1981) Vol. 19,
No. 8, pp. 867-868.
AU VORMBROCK R (Reprint); HELGER R
AN 81:397762 SCISEARCH

L25 ANSWER 143 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Evaluation and improvement of a **commercial** method for routine
chromatographic measurement of **glycosylated** hemoglobins
SO Lab (Milan) (1981), 8(4), 401-6
CODEN: LABMDV; ISSN: 0390-069X
AU Mosca, A.; Carenini, A.; Samaja, M.; Saibene, V.
AN 1982:158508 HCAPLUS
DN 96:158508

L25 ANSWER 144 OF 156 MEDLINE on STN DUPLICATE 58

TI New chromatographic system for the rapid analysis and preparation of
 colostrum sialyloligosaccharides.
 SO JOURNAL OF CHROMATOGRAPHY, (1981 Aug 7) 212 (3) 313-22.
 Journal code: 0427043. ISSN: 0021-9673.
 AU Veh R W; Michalski J C; Corfield A P; Sander-Wewer M; Gies D; Schauer R
 AN 81264524 MEDLINE

L25 ANSWER 145 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Determination of glycosylated hemoglobin (HbG): critical evaluation of a
 commercially available micromethod
 SO Giornale Italiano di Chimica Clinica (1981), 6(3), 237-45
 CODEN: GICCD7; ISSN: 0392-2227
 AU Fedele, D.; Marchiori, E.; Brugiolo, R.; Zangaglia, O.; Valerio, G.
 AN 1982:403067 HCAPLUS
 DN 97:3067

L25 ANSWER 146 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Rapid changes in the long-term parameter hemoglobin A1: relation to
 choice of method for determination
 SO Verhandlungen der Deutschen Gesellschaft fuer Innere Medizin (1981), 87,
 88-91
 CODEN: VDGIA2; ISSN: 0070-4067
 AU Sonnenberg, G. E.; Eichholz, U.; Chantelau, E.; Berger, M.
 AN 1982:158769 HCAPLUS
 DN 96:158769

L25 ANSWER 147 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Evaluation of a **commercial** kit for measurement of
glycosylated hemoglobin in canine blood
 SO Veterinary Clinical Pathology (1981), 10(1), 21-4
 CODEN: VCPADJ; ISSN: 0275-6382
 AU Mahaffey, Edward A.; Cornelius, L. M.
 AN 1983:85586 HCAPLUS
 DN 98:85586

L25 ANSWER 148 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Nonenzymic glycosylation of proteins. A warning
 SO Journal of Biological Chemistry (1980), 255(14), 6717-20
 CODEN: JBCHA3; ISSN: 0021-9258
 AU Trueeb, Beat; Holenstein, Claudia G.; Fischer, Rene W.; Winterhalter,
 Kaspar H.
 AN 1980:545795 HCAPLUS
 DN 93:145795

L25 ANSWER 149 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI A method for specifically measuring hemoglobin A1C with a disposable
 commercial ion-exchange column
 SO Clinica Chimica Acta (1980), 108(2), 329-32
 CODEN: CCATAR; ISSN: 0009-8981
 AU Maquart, Francois Xavier; Gillery, Philippe; Bernard, Jean Francois;
 Mante, Jean Pierre; Borel, Jacques Paul
 AN 1981:60873 HCAPLUS
 DN 94:60873

L25 ANSWER 150 OF 156 MEDLINE on STN DUPLICATE 59
 TI A temperature conversion nomogram for glycosylated hemoglobin analysis.
 SO CLINICA CHIMICA ACTA, (1980 Jun 10) 104 (2) 251-7.
 Journal code: 1302422. ISSN: 0009-8981.
 AU Hankins W D; Holladay L
 AN 80223379 MEDLINE

L25 ANSWER 151 OF 156 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
 RESERVED. on STN
 TI Automated colorimetric estimation of glycosylated haemoglobins.

SO Clinica Chimica Acta, (1980) 106/1 (45-50)..
 CODEN: CCATAR

AU Burrin J.M.; Worth R.; Ashworth L.A.; et al.
 AN 80206979 EMBASE

L25 ANSWER 152 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Study of the properties of membrane-bound sialyltransferase from frog
 (Rana temporaria) liver
 SO Biokhimiya (Moscow) (1979), 44(9), 1648-56
 CODEN: BIOHAO; ISSN: 0006-307X
 AU Lapina, E. B.; Gabrielyan, N. D.; Khorlin, A. Ya.
 AN 1979:588616 HCAPLUS
 DN 91:188616

L25 ANSWER 153 OF 156 MEDLINE on STN DUPLICATE 60
 TI A simple microchromatographic column for determination of hemoglobins Ala
 + b and Alc.
 SO HEMOGLOBIN, (1979) 3 (6) 411-28.
 Journal code: 7705865. ISSN: 0363-0269.
 AU Friedman S; Humbert J R
 AN 80071587 MEDLINE

L25 ANSWER 154 OF 156 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 61
 TI FRACTIONATION OF SIALYL OLIGO SACCHARIDES OF HUMAN MILK BY ION EXCHANGE
 CHROMATOGRAPHY/.
 SO Analytical Biochemistry, (1978) Vol. 85, No. 2, pp. 602-608.
 CODEN: ANBCA2. ISSN: 0003-2697.
 AU SMITH D F [Reprint author]; ZOPF D A; GINSBURG V
 AN 1978:224249 BIOSIS

L25 ANSWER 155 OF 156 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 TI APPLICATION OF A RAPID MICRO **SCALE** PROCEDURE FOR MEASURING
GLYCOSYLATED HEMO GLOBINS IN DIABETIC PATIENTS.
 SO Clinical Science and Molecular Medicine, (1978) Vol. 54, No. 2, pp. 21P.
 CODEN: CSMMA. ISSN: 0301-0538.
 AU WELCH S G; BOUCHER B J; YUDKIN J; FRANCE M W; SWINDLEHURST C A
 AN 1979:24166 BIOSIS

L25 ANSWER 156 OF 156 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
 RESERVED. on STN DUPLICATE 62
 TI [Serological identification of a cold agglutinin having an unusual
 specificity].
 SEROLOGISCHE IDENTIFIZIERUNG EINES KALTEAGGLUTININS MIT UNGEWOHNLICHER
 SPEZIFITAT.
 SO Arztliche Laboratorium, (1977) 23/11 (507-509).
 CODEN: AEELAAH
 AU Geisen H.P.; Ebert W.; Drescher H.
 AN 78218099 EMBASE

=> save temp 125 batch/a

ANSWER SET L25 HAS BEEN SAVED AS 'BATCH/A'

=> d ab 5,9,19,21,26,28,30,41-45,47,48,55,70,72,76,81,83,91,96,104,119

L25 ANSWER 5 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 2
 AB Chinese hamster ovary (CHO) cells producing the recombinant
 glycoprotein human antithrombin III (rhAT III) were batch cultivated in a
 20-L bioreactor for 13 days. Neuraminidase activity in cell-free
 supernatant was monitored during cultivation and free sialic acid was
 determined by HPLC. Neu5Ac alpha(2-->3)Gal-specific Maackia amurensis and
 Gal beta(1-->4)GlcNAc-specific Datura stramonium agglutinin were used for
 determination of **sialylated** and desialylated rhAT III,

respectively. A **commercial** test kit was used for evaluation of functional rhAT III activity. Supernatant neuraminidase as well as lactate dehydrogenase activity increased significantly during batch growth. The enhanced number of dead cells correlated with increased neuraminidase activity, which seemed to be principally due to cell lysis, resulting in release of cytosolic neuraminidase. Loss of terminally alpha(2-->3) linked sialic acids of the oligosaccharide portions of rhAT III, analyzed in lectin-based Western blot and lectin-adsorbent assays, correlated with a decrease of activity of rhAT III produced throughout long-term batch cultivation. Thus, structural oligosaccharide integrity as well as the functional activity of recombinant glycoprotein depend on the viability and mortality of the bioreactor culture, and batches with a high number of viable cells are required to guarantee production of glycoproteins with maximum biological activity. (C) 1997 John Wiley & Sons, Inc.

L25 ANSWER 9 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 4

AB Although serum-free media have been widely used in mammalian cell culture for therapeutic protein production, the effects of serum-substitutes on product quality have not been extensively examined. This study observed an adverse effect of Primatone RL, an animal tissue hydrolysate commonly used as a serum-substitute to promote cell growth, on sialylation of interferon-gamma (IFN-gamma) derived from Chinese hamster ovary (CHO) cell culture in both **batch** and **fed-batch** modes. In **batch** cultures, decreased **sialylation** was observed at each of the **glycosylation** sites (i.e., Asn(25) and Asn(97)) of IFN-gamma with the use of elevated concentrations of the peptone. Although poorest sialylation was obtained with the use of a growth-inhibiting concentration of Primatone RL, diminished sialylation was observed at the optimal peptone concentration for cell growth and product yield. Since incubation of the product in Primatone RL-supplemented acellular medium did not result in decreased sialylation, the negative effect of Primatone RL could not be attributed to extracellular desialylation of IFN-gamma by components of the peptone. In the fed-batch mode, a culture utilizing a serum-free feeding medium supplemented with Primatone RL demonstrated poorer sialylation than a similar culture not fed the peptone. The results of both the batch and fed-batch experiments indicate that the adverse effect of the peptone was not due solely to ammonia accumulation. (C) 1997 John Wiley & Sons, Inc.

L25 ANSWER 19 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

AB Sialylation of interferon-gamma (IFN-gamma) produced by CHO cell culture was monitored by reverse-phase HPLC separations of the site-specific pools of tryptic glycopeptides representing the product's 2 potential N-linked glycosylation sites (i.e. Asn25 and Asn97). The IFN-gamma displayed both site- and branch-specific differences in sialylation as the Asn25 site and the Man(alpha-1,3) branch of the predominant complex biantennary glycan structures at each site were preferentially sialylated. When the **sialylation** profile of IFN-gamma was analyzed throughout a suspension **batch** culture, **sialylation** at each site and branch was found to be incomplete but relatively constant until a steady decrease in sialylation was observed concurrent with loss of cell viability. The introduction of competitive sialidase-inhibitor into the culture supernatant prevented the loss of sialylation following but not prior to cell death, thus indicating that the sialic acid content of the final product was determined by both incomplete intracellular sialylation and extracellular desialylation. The influences of culture medium on sialylation were also studied. (0 ref)

L25 ANSWER 21 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

AB A new method for enzymatic galactosylation of a monosaccharide or oligosaccharide, with in situ nucleotide sugar coenzyme regeneration, involves reaction with sucrose-synthase (SS, EC-2.4.1.13), beta-1,4-galactosyltransferase (GT) and UDP-glucose-4-epimerase (UDPGP,

EC-5.1.3.2), and a keto sugar or derivative is added as an activator of UDPGE. The activator is preferably dUDP-6-deoxy-D-xylohexulose, TDP-6-deoxy-D-xylo-hexulose, 6-deoxyglucosone, galactosone, allosone or glucosone, at 0.01-20 (preferably 0.1) mM, and the process is carried out as a repetitive batch operation in an ultrafiltration cell. The products are useful as precursors of sialylated or fucosylated sugars, e.g. for production of sialyl-Lewis-X or derivatives involved in cell-cell recognition. The activator reactivates UDPGE in situ, eliminating the need for repeated addition of this expensive enzyme and allowing repeated use without immobilization, and has no adverse effects on activity of the other enzymes. (36pp)

L25 ANSWER 26 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN

AB A review, with 10 refs., on the structure and a large-scale preparation of **sialyloligosaccharides** from egg yolk.

L25 ANSWER 28 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN

L25 ANSWER 30 OF 156 MEDLINE on STN DUPLICATE 12

AB Insects respond to a bacterial challenge by rapidly synthesizing a diverse range of antibacterial and antifungal peptides. One of them, drosocin, a 19-residue proline-rich antibacterial peptide, was isolated from *Drosophila*. This peptide carries a disaccharide moiety attached to a threonine residue in mid-chain position. The present report describes the enlarged-scale chemical synthesis of drosocin, **glycosylated** with Gal (beta 1 --> 3)GalNAc(alpha 1 --> O). We have studied the range of activity of the synthetic glycopeptide, of two truncated glycosylated isoforms, and of the unglycosylated L and D enantiomers. Both isolated and chemically synthesized drosocins carrying the disaccharide display the same antibacterial activity. Using circular dichroic spectroscopy we demonstrated that the O-linked disaccharidic motif did not affect the backbone conformation of drosocin. The antibacterial activity of the synthetic glycopeptide was directed against gram-negative strains with the exception of the gram-positive bacteria *Micrococcus luteus*. Deletion of the first five N-terminal residues completely abolished the activity of drosocin. As a first approach to the study of the mode of action of drosocin, we have synthesized a non-glycosylated D enantiomer and, using this molecule, we have shown that drosocin may act on the gram-negative bacteria through a stereospecific target.

L25 ANSWER 41 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 21

AB A Chinese hamster ovary cell line expressing recombinant human interferon-gamma (IFN-gamma) was grown in a 15-l stirred tank fermenter. N-linked carbohydrate populations associated with both Asn(25) and Asn(97) were isolated by reverse-phase HPLC separation of trypsin-digested IFN-gamma and their structure determined by matrix-assisted laser desorption/ionisation mass spectrometry (MALDI-MD) in combination with exoglycosidase array sequencing. The predominant oligosaccharide at both glycosylation sites throughout the culture was a complex biantennary structure, Gal(2)GlcNAc(2)Man(3)GlcNAc(2), which was fucosylated when attached to Asn(25) but not to Asn(97). A gradual decrease in this biantennary structure was observed, with a concomitant increase in the proportion of truncated and high-mannose glycans. These experiments demonstrate the relative stability of **glycosylation** during **batch** culture and the definitive site-specific **glycosylation** data that can be obtained using MALDI-MS as a monitoring technique.

L25 ANSWER 42 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

AB The control of N-glycosylation in a CHO-320 cell line that produces recombinant interferon-gamma (IFN-G) was used as a model system to study the effects on the glycosylation process of protein structure, host cell

type and cell culture conditions. CHO-320 cells were adapted to grow suspended in serum-free medium based on RPMI-1640 supplemented with cattle serum albumin (CSA), insulin, transferrin and trace element supplements. The glycoform proportions were held constant at steady-state using glucose-limited chemostat systems; at a constant dilution rate of 0.015/hr, cell growth and IFN-G were transiently improved by pulses of 3.8 mM or 5.0 mM glucose. The lipoprotein supplement ExCyte minimized **glycosylation** deterioration in **batch** culture, and partially substituted the CSA content of the medium with a fatty acid-free preparation had a similar effect. Recombinant IFN-G was routinely purified from cell culture supernatant using an anti-IFN-G immunoaffinity matrix, yielding more than 98% pure IFN-G. Oligosaccharide structures of CHO cell-derived IFN-G, the influence of host cell type on IFN-G glycosylation, and the consequences of drug efficacy were also discussed. (28 ref)

- L25 ANSWER 43 OF 156 MEDLINE on STN DUPLICATE 22
 AB The culture environment exerts a major effect on the glycosylation pattern of recombinant human interferon-gamma (IFN-gamma) produced by Chinese-hamster ovary (CHO) cells. The recombinant IFN-gamma is heterogeneous and consists of a mixture of fully (2N), partially (1N) and non-**glycosylated** (0N) glycoforms, and throughout **batch** cultures there is a decline in the proportion of fully **glycosylated** IFN-gamma. Glucose and glutamine, nutrients that are depleted early in such cultures, were *prima facie* candidates for causing such a shift in glycoform profile. Batch feeding of these nutrients did not prevent the decline in 2N glycoform, but the glycosylation pattern of IFN-gamma was affected by the initial glutamine concentration in the culture. Under different serum-free environments the extent of IFN-gamma glycosylation was affected by (1) the concentration of BSA, (2) the quality of BSA, (3) the lipid composition of the culture medium and (4) the presence of surfactants. Moreover, the inclusion of serum in cultures caused changes in the molecular masses of the major glycoforms, that was indicative of cleavage of the core polypeptide. The results reported emphasize the necessity of considering the effects of culture media on product quality as well as on product quantity during process optimization.
- L25 ANSWER 44 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 AB Engineering issues in applied mammalian cell culture are reviewed with respect to: (1) secreted products from mammalian cells (monoclonal antibody production as a model for secreted protein production, increasing the productivity of monoclonal antibody production, product quality issues, and cell culture vessels for the production of secreted mammalian cell products); (2) mammalian cells as products (factors controlling cell growth and differentiation, and culture vessel design for stem cell expansion). Engineering principles which have been applied to fermentor designs for microbial systems may be used to create mammalian cell culture vessels for quite dissimilar applications. For protein expression challenges remain in increasing specific productivity of cell lines, enabling protein-free culture on a large-**scale** and the control of quality aspects e.g. **glycosylation** heterogeneity and viral clearance. In stem cell culture, challenges remain in improving recovery during cell separation, media design and culture vessel design to ensure tight control of important factors (dissolved oxygen tension). (21 ref)
- L25 ANSWER 45 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN
 AB Gal β 1,4GlcNAc α 2,6-sialyltransferase (EC 2.4.99.1) catalyzes the incorporation of sialic acids at the terminal positions of glycoconjugates through a NeuAc α 2,6-Gal linkage. The cDNA sequences for mouse, rat, human and chicken, along with the genomic DNA sequence, and tissue specific alternative splicing in rat have been reported. To gain a further insight into the structure and function

relationship, we attempted the large **scale** production of a recombinant **sialyltransferase** in *Escherichia coli* in an insol. form. The product was solubilized with urea, and renatured to give the active enzyme. The renatured enzyme was similar to the enzyme obtained from rat liver, except for its dependence on ionic strength.

L25 ANSWER 47 OF 156 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE
23

AB Fed-batch culture currently represents the most attractive choice for large scale production of monoclonal antibodies (MAbs), due to its operational simplicity, reliability, and flexibility for implementation in multipurpose facilities. Development of highly productive cell lines, maximization of cell culture longevity, and maintenance of high specific antibody secretion rates through genetic engineering techniques, nutrient supplementation, waste product minimization, and control of environmental conditions are important for the design of high-yield fed-batch processes. Initially simple supplementation protocols have evolved into sophisticated serum-free multivitamin feeds that result in MAb titers on the order of 1-2 g/L. Limited research has been published to date on the effects of various culture parameters on potentially important quality issues, such as MAb **glycosylation** and stability. Although most fed-batch protocols to date have relied on relatively simple control schemes, increasingly sophisticated algorithms must be applied in order to take full advantage of the potentially additive effects of manipulating nutrient and environmental parameters to maximize fed-batch process productivity.

L25 ANSWER 48 OF 156 NTIS COPYRIGHT 2004 NTIS on STN

AB Specificity determinants of human acetylcholinesterase (HuAChE) towards ligands (substrate and some reversible and irreversible inhibitors) were identified by combination of site-directed mutagenesis, molecular modeling and kinetic studies with enzymes mutated in active center residues Trp86, Glu202, Trp286, Phe295, Phe297, Tyr337, Phe338 and Glu450. Thus, the anionic and hydrophobic subsites as well as the acyl pocket were identified. Enzymes with resistance to OP aging were engineered. The role of N-glycosylation in the function, biosynthesis and stability of HuAChE was examined by site-directed mutagenesis (Asn to Gln substitution) of the three potential N **glycosylation** sites, Asn265, Asn350 and Asn464. Large **scale** preparation of recombinant HuAChE was performed utilizing the microcarrier technology. Over 500 milligrams of enzyme was prepared for x-ray crystallography.

L25 ANSWER 55 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

AB Recombinant protein glycosylation is reviewed with respect to: (1) reasons why **glycosylation** is significant (**commercial** importance, methods used to study effects of **glycosylation**, and the effects on protein solubility, protein stability, biological activity, pharmacokinetics and immunogenicity); (2) oligosaccharide structures (N-glycosylation and O-glycosylation); (3) glucan analysis (electrophoresis, chromatography, NMR and MS); and (4) influences on glycosylation (protein structure, host cell type, culture environment and method of cell culture). Improvements in analytical procedures offer detailed glycan analysis during or soon after host cell culture. Detailed knowledge of glycoprotein biosynthesis may aid control of glycan heterogeneity by using culture media formulations/supplements. Host cells may be engineered for biased production of certain glycoforms. Advances in carbohydrate chemistry and recombinant glycosyltransferases may lead to construction of complex oligosaccharides, which may be grafted onto recombinant proteins made in prokaryotes. Until this time, human recombinant glycoproteins are best produced in animal cell culture. (165 ref)

L25 ANSWER 70 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

AB Glycosylation is cell type-specific, and thus recombinant proteins

produced in heterologous systems are almost invariably glycosylated differently from the native form. Differences can include differences in both the number of attached glycan chains and precise glycan sequences at an individual glycosylation site. Glycosylation can influence activity, pharmacokinetics, and immunogenicity, and different glycosylation patterns may be associated with differences in the therapeutic profile. It is thus useful to analyze the glycosylation pattern of a recombinant protein at as early a stage as possible, and to compare to the native form, and to screen for determinants which interact with the immune system and lectins. The glycosylation pattern is very sensitive to culture method and variations in the extracellular environment, and it is thus important during **scale-up** to ensure that the **glycosylation** pattern is maintained. A production process is only valid if it reproducibly allows isolation of protein with a constant **glycosylation** pattern. It is useful to assess **glycosylation** on a **batch-to-batch** basis. (0 ref)

L25 AB ANSWER 72 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
Separation of a glycosylated 28-residue synthetic peptide from byproducts of the glycosylation reaction was performed by displacement chromatography in a reverse-phase system with benzyltrimethylhexadecylammonium chloride as the displacer and a water/acetonitrile/phosphoric acid system. During method development using a column of internal diameter 0.46 cm problems attributed to either adsorption azeotropy or aggregation were overcome by optimizing acetonitrile concentration and operating at 55 deg. The method was scaled-up to 22 g per run on an axial compression column of internal diameter 15 cm. Compared with conventional elution chromatography conducted on a similar scale, the displacement process realized a nearly 8-fold increase in throughput with a significant reduction in solvent consumption. Details regarding process development and scale-up were presented. (0 ref)

L25 AB ANSWER 76 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
Applications of aldolases and transferases in production of sialic acid derivatives were discussed. Sialyl-aldolase was used for production of 3-deoxy-D-manno-2-octulosonic acid. N-glycolylneuraminic acid (NeuGc) was produced on a large **scale** from N-glycolylglycosamine using **sialyl**-aldolase, and CMP-NeuGc (a tumor-associated antigen precursor) was produced using acylneuraminate-cytidylyltransferase (EC-2.7.7.43). 2 Pig liver sialyltransferase enzymes were purified by affinity chromatography, immobilized and used in sialyloligosaccharide production. Alpha-2,6-galactosyl- beta-1,4-N-acetylglucosamine-sialyltransferase was used for sialylation of 3 different synthetic oligosaccharides. Alpha-2,3-galactosyl- beta-1,3-N-acetylglactosamine-sialyltransferase reacted with Gal-beta-1,3-GlcNAc, giving the 1st preparative synthesis of NeuAc-alpha-2,3-Gal-beta-1,3-GlcNAc (an epitope of the human pancreas adenocarcinoma tumor-associated antigen CA-50). Enzymatic synthesis seems to be the method of choice for modification of oligosaccharide structures on glycoproteins. (5 ref)

L25 AB ANSWER 81 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
The recent development of enzyme-catalyzed reactions for the production of sugars, peptides and related substances was discussed. Topics considered included: the preparation of uncommon and aza sugars by aldolase-catalyzed aldol condensation followed by Pd-mediated reductive amination; methods for enzyme-catalyzed **glycosylation** using glycosyltransferase, glycosidase, transglycosidase and phosphorylase enzymes; large-**scale** production of oligosaccharides catalyzed by glycosyltransferases with in situ regeneration of sugar nucleotides; the coupling of glycosidase- and glycosyltransferase-catalyzed reactions for oligosaccharide production with minimal requirements for sugar nucleotide regeneration; cloning and expression of the catalytic domain

of glycosyltransferase for oligosaccharide production in *Escherichia coli*; the glycosyltransferase-catalyzed production of uncommon oligosaccharides such as sialyl Lewis x and sialyl Le(x) glycal; production of large peptides and their conjugates; the use of enzyme engineering to make enzymes more stable in dimethylformamide; and engineering subtilisin (EC-3.4.21.14) to catalyze ligation reactions. (58 ref)

L25 ANSWER 83 OF 156 HCAPLUS COPYRIGHT 2004 ACS on STN

AB Recombinant human interleukin-5 (hIL-5) has been expressed at high levels and produced in large quantities in baculovirus infected Sf9 insect cells. The glycosylated protein was purified using immuno-affinity chromatog. and gel filtration. Purified hIL-5 has been crystallized using standard vapor diffusion techniques with PEG as a co-precipitant. The crystals belong to the C2 space group and diffract to 2 Å.

L25 ANSWER 91 OF 156 MEDLINE on STN DUPLICATE 42

AB alpha-Neup5Ac-(2----3)-beta-D-Galp-(1----3)-D-GlcpNAc (2) and, alpha-Neup5Ac-(2----3)-beta-D-Galp-(1----3)-beta-D-GlcpNAcOMBn++ were prepared on a large scale by the action of beta-D-Galp-(1----3)-D-GalpNAc (2----3)-alpha-sialyltransferase (partially purified from porcine liver) on beta-D-Galp-(1----3)-D-GlcpNAc and beta-D-Galp-(1----3)-beta-D-GlcpNAcOMBn, respectively. The trisaccharide 2 is the epitope of the tumor-associated carbohydrate antigen CA 50, highly expressed in human pancreatic adenocarcinoma.

L25 ANSWER 96 OF 156 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

L25 ANSWER 104 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

AB Human recombinant interleukin-3 (IL-3) was produced by gene cloning and expression in bacteria (*Escherichia coli* HB101, DH1, MC1061, *Bacillus subtilis* 1A40 and *Bacillus licheniformis* T9), yeast (*Saccharomyces cerevisiae* D273-10B and *Kluyveromyces lactis* CBS 2360) and mammalian cells (COS, C127 (ATCC CRL 1616) and CHO-12). A low-cost production and purification scheme was designed using *B. licheniformis* because the protein secreted by *B. licheniformis* was not glycosylated and had a mol. weight of about 15,000. Vector plasmid pGB/IL-322 and plasmid pGB/IL-326 were constructed containing the alpha-amylase (EC-3.2.1.1) signal peptide fused to the sequences encoding mature IL-3 and placed downstream of a strong alpha-amylase and *HpaII* promoter, respectively. IL-3 (3 g) was purified from cell-free filtrate (48 l) by hydrophobic interaction chromatography on Fractogel TSK butyl 650C, 60% (NH₄)₂SO₄ precipitation, anion-exchange chromatography on Q-Sepharose Fast Flow and concentration by ultrafiltration (twice), gel filtration on Sephacryl S100HR and ultrafiltration. The purified and formulated product entered clinical trials in November, 1989. (28 ref)

L25 ANSWER 119 OF 156 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

AB A human cDNA containing the complete coding region for the lysosomal glycoprotein glucocerebrosidase (EC-3.2.1.45) was introduced into the genome of *Autographa californica* nuclear-polyhedrosis virus (AcNPV) downstream from the polyhedrin promoter. The recombinant virus (pAc373/GC) was cotransfected with wild-type AcNPV DNA into *Spodoptera frugiperda* SF9 cells using a modified calcium phosphate precipitation technique. Recombinant baculo virus containing human glucocerebrosidase cDNA was obtained, and this was plaque-purified and used to infect SF9 cells. The recombinant enzyme was characterized and found to be active in SF9 cells. High levels of glucocerebrosidase were produced; 40% of which was in the culture medium. The N-terminal amino acid sequence of the recombinant product was identical to that of mature, human placental glucocerebrosidase. The enzyme in the culture supernatant and in the SF9 cells was **glycosylated**. The insect cell culture system could be used for large-scale recombinant glucocerebrosidase production, which is of clinical interest. (48 ref)

=> fil .becpat
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
45.55	45.76

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

CA SUBSCRIBER PRICE

SINCE FILE	TOTAL
ENTRY	SESSION
-2.08	-2.08

FILES 'BIOTECHDS, HCAPLUS, WPIDS' ENTERED AT 17:58:00 ON 09 JAN 2004
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

3 FILES IN THE FILE LIST

=> s l12 and wo/pc and pry<=1997 and py>=2000 range=2000,
FILE 'BIOTECHDS'

1169 COMMERCIAL
2480 SCALE
2026 BATCH
133 SIALYL?
903 GLYCOSYLAT?
11 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)
27413 WO/PC
2005 PRY<=1997
(PRY<=1997)
76000 PY>=2000
(PY>=2000)

L26 0 L12 AND WO/PC AND PRY<=1997 AND PY>=2000

FILE 'HCAPLUS'

3703 COMMERCIAL
47483 COM
48325 COMMERCIAL
(COMMERCIAL OR COM)
84373 SCALE
18080 BATCH
1917 SIALYL?
9915 GLYCOSYLAT?
48 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)
182266 WO/PC
49509 PRY<=1997
3654205 PY>=2000

L27 0 L12 AND WO/PC AND PRY<=1997 AND PY>=2000

FILE 'WPIDS'

16312 COMMERCIAL
33317 SCALE
6124 BATCH
179 SIALYL?
1102 GLYCOSYLAT?
5 (COMMERCIAL OR SCALE OR BATCH) (10A) (SIALYL? OR GLYCOSYLAT?)
388695 WO/PC
231409 PRY<=1997
(PRY<=1997)
2828304 PY>=2000
(PY>=2000)

L28 0 L12 AND WO/PC AND PRY<=1997 AND PY>=2000

TOTAL FOR ALL FILES

L29 0 L12 AND WO/PC AND PRY<=1997 AND PY>=2000

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

11.33

57.09

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-2.08

STN INTERNATIONAL LOGOFF AT 17:59:24 ON 09 JAN 2004